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AS25486

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ISSUED 2004-04

CUSTODIAN: SAE AE-8/AE-8A

**SAE Aerospace**  
An SAE International Group**AEROSPACE STANDARD**

CONNECTOR, PLUG, ATTACHABLE,  
EXTERNAL ELECTRIC POWER, AIRCRAFT,  
115/200 VOLT, 400 HERTZ

**AS25486**  
SHEET 1 OF 4

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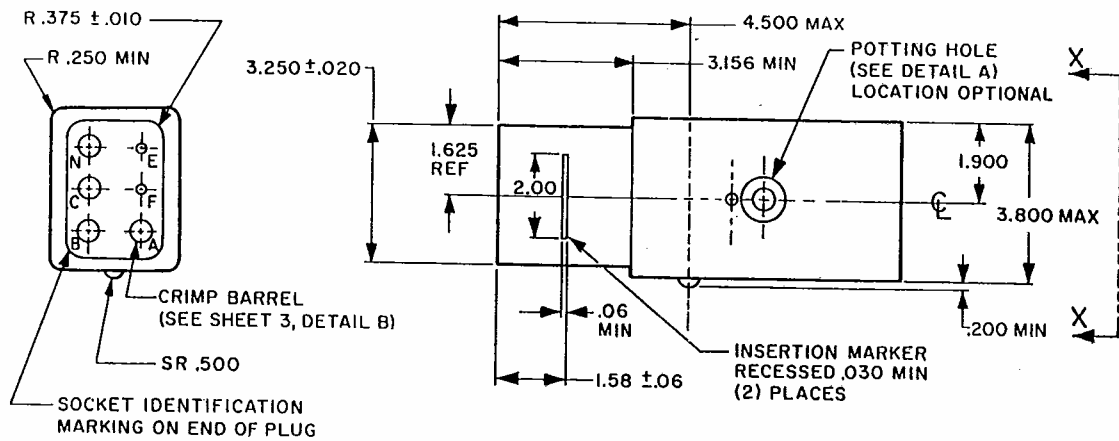
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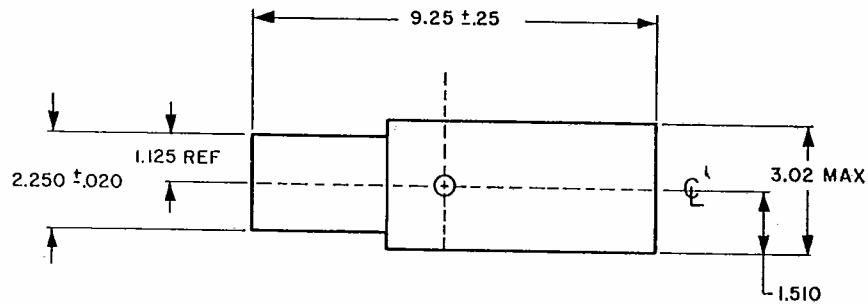
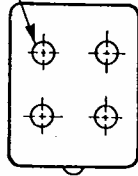
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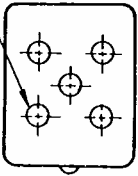


LOCATION OF WIRE ENTRY HOLES OPTIONAL



VIEW X-X GROMMET MS25486-16 TO -19

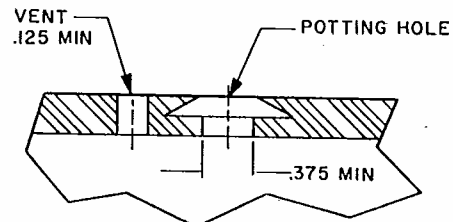
LOCATION OF WIRE ENTRY HOLES OPTIONAL



VIEW X-X GROMMET MS25486-30 TO -33

POTTING HOLE PLUG

DESIGN AND LOCATION OF POTTING HOLE & HOLE PLUG ARE THE MANUFACTURERS OPTION



DETAIL A

TYPICAL CROSS-SECTION  
DASH -18, -19, -32, -33

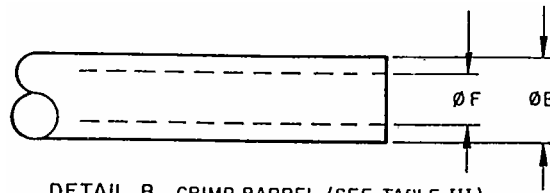
TABLE I. METRIC CONVERSIONS.

INCH	MM	INCH	MM	INCH	MM
.010	.25	.375	9.53	1.510	38.35
.020	.51	.438	11.13	1.580	40.13
.025	.64	.458	11.63	1.625	41.28
.030	.76	.500	12.70	1.900	48.26
.060	1.52	.518	13.16	2.000	50.80
.125	3.19	.528	13.41	2.250	57.15
.129	3.28	.558	14.17	3.020	76.71
.135	3.43	.578	14.68	3.156	80.16
.200	5.08	.620	15.75	3.250	82.55
.215	5.46	.640	16.26	3.800	96.52
.230	5.84	1.000	25.40	4.500	114.30
.250	6.35	1.125	28.58	9.250	234.95

TABLE II. PART NUMBER, WIRE SIZE, DIMENSIONS, AND SUPERSEDED PART NUMBERS.

PART NO.	A,B,C,N WIRE SIZE	E,F WIRE SIZE	SUPERSEDES	DESCRIPTION
MS25486-16 MS25486-17	0 00	SEE NOTE 6	MS25486-1 MS25486-3	FOR CABLE WIRES WITHOUT CONTROL LEADS.
MS25486-18 MS25486-19	0 00	SEE NOTE 6	----- -----	*FOR CABLE WIRES WITHOUT CONTROL LEADS WITH POTTING HOLE (SEE REQUIREMENT 8).
MS25486-30 MS25486-31	0 00	12	----- -----	FOR CABLE WITH CONTROL LEADS.
MS25486-32 MS25486-33	0 00	12	----- -----	*FOR CABLE WITH CONTROL LEADS WITH POTTING HOLE (SEE REQUIREMENT 8).

\*AIR FORCE USE ONLY



**DETAIL B** CRIMP BARREL (SEE TABLE III)  
DASH -16 THRU -19 AND -30 THRU -33

TABLE III. WIRE SIZE AND CRIMP BARREL DIMENSIONS.

WIRE SIZE	ØE	ØF
0	.578	.458
	.558	.438
00	.640	.528
	.620	.518
12	.230	.135
	.215	.129

REQUIREMENTS:

1. MATERIAL: SEE ACQUISITION SPECIFICATION.
2. MOLD OR STAMP WIRE SIZE ON CRIMP BARREL. REQUIRED ON SOCKET CONTACTS OF ATTACHABLE PLUGS ONLY.
3. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCE: DECIMALS  $\pm .025$ .
4. METRIC EQUIVALENTS (TO NEAREST .01 MM) ARE GIVEN FOR GENERAL INFORMATION ONLY AND ARE BASED UPON 1 INCH = 25.40MM.
5. UNLESS OTHERWISE INDICATED, DIMENSIONS ARE SYMMETERICAL ABOUT CENTERLINES.
6. PLUGS USED WITH CABLES WITHOUT CONTROL LEADS, SHALL HAVE SOCKETS "E" AND "F" CONNECTED TOGETHER WITHIN THE PLUG BY A COPPER OR BRASS JUMPER HAVING A CROSS-SECTIONAL AREA OF AT LEAST 6530 CIRCULAR MILS.
7. EACH PLUG, WHEN MATED WITH MS90362-3 RECEPTACLE, SHALL MEET ALL THE REQUIREMENTS OF THE ACQUISITION SPECIFICATION.
8. MS25486-18, -19, -32, -33 PLUGS WITH POTTING HOLES ARE FOR AIR FORCE USE ONLY. AFTER ATTACHMENT MS25486-18, -19, -32 AND -33 SHALL BE FILLED WITH MIL-S-8516 OR MIL-S-23586 SEALING COMPOUND THROUGH THE PRECUT POTTING HOLES.
9. CRIMP 12 AWG WIRES WITH MIL-C-22520/24 CRIMP TOOL. CRIMP 1/0 AND 2/0 AWG WIRES WITH MS25441 CRIMP TOOL USING MS90485 CRIMP DIES.
10. ONLY NON-CORROSIVE HARDWARE SHALL BE USED IN THE MANUFACTURE OF THE PLUG.